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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,060	07/05/2001	Shuuji Yano	Q65306	1329

7590

09/11/2003

SUGHRUE MION ZINN MACPEAK & SEAS, PLLC  
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EXAMINER

TRUONG, BAO Q

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/898,060

Applicant(s)

YANO ET AL.

Examiner

Bao Q. Truong

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

2. Claims 1, 2, 5, 6 and 7 are objected to because of the following informalities:

Claim 1, there are lack of antecedent basis for "the other surface" on line 3, "the one of them" on line 4, "the light emitting side" on line 8, and "the visual recognition side" on line 9. "its" on line 3 and "that" on line 11 should be changed to what they refer.

Claim 2, "that" on line 2 should be changed to what it refers.

Claims 5 and 6, is the "a light emitting means" different from the "a light emitting means" in claim 1 line 4?

Claim 7, is the "a light emitting means" on line 2 different from the "a light emitting means" in claim 1 line 4? "its" on line 8 and "that " on line 13 should be changed to what they refer.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Masuda et al. [US 6,340,999].

Regarding claim 1, Masuda et al. disclose a LCD having a light pipe [3] with light emitting means [3c], a light source [2], a liquid crystal display panel [5] with a reflective layer [7] and an adhesive layer [10a] having a refractive index [1.38] lower than a refractive index [1.49] of the light pipe [3] (figures 1 and 10, column 10 lines 50-65, column 11 lines 50-54, column 15 lines 25-39, column 16 lines 23-28).

Regarding claim 2, Masuda et al. disclose a refractive index [1.38] of the adhesive layer [10a] and a refractive index [1.49] of the light pipe [3] (figures 1 and 10, column 11 lines 50-54, column 16 lines 23-28).

Regarding claims 3 and 4, Masuda et al. disclose the adhesive layer [10a] having a full light transmittance of 90% or more, or its haze value of 10% or less (column 16 lines 23-28).

Regarding claim 5, Masuda et al. disclose the light pipe [3] having a light emitting means [3c] on the upper surface and an emitting light from the lower surface [the surface contact with layer 10, 10a] having a direction within 30 degrees from the reference plane of the lower surface (figures 1 and 10).

Regarding claim 6, Masuda et al. disclose the light pipe [3] having a light emitting means [3c], which composes of a plurality of asperities triangular [3f] with a tile angle [from a reflective portion 3e] of 35 – 48 degrees (figures 1 and 10).

Regarding claim 7, Masuda et al. disclose the light pipe [3], a light emitting means being a structure of prism-like asperities [3c] arranged at pitches of 390  $\mu\text{m}$ , a reflective portion [3e] tilt angle of 35-48 degrees, a length of the reflective portion [3e] being 20  $\mu\text{m}$ , a propagation portion [3d] tilt angle of 0 – 10 degrees, a length of the propagation portion [3d] being 370  $\mu\text{m}$  (figures 1 and 10, column 11 lines 1-23).

Regarding claim 8, Masuda et al. disclose the asperities [3f] having ridges [3e] with in a range of  $\pm 30$  degrees (figures 1 and 10, column 11 lines 1-23).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Q. Truong whose telephone number is (703) 308-6452. The examiner can normally be reached on Monday-Friday (8:00 AM - 4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached on (703) 305-4939. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

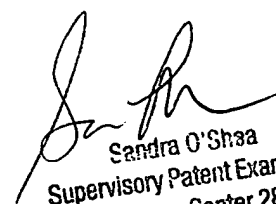
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

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Bao Q. Truong  
Examiner  
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BQT



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